

Arranging said first and second portions so that at least one of said first islands is aligned with at least one of said apertures; and
Applying a relative shearing force to said first and second portions so as to cause said islands to be slidingly engaged with said apertures."

Claim 48 is allowable and patentable over the applied references in regard to at least the following respects:

In General it should be noted that the applicant's previous **Office Action Response** dated June 19, 2003 distinguishes the present invention from the applicable prior art and should be considered generally relevant to new, Claim 48.

Per 35 USC Article 102

With regard to Allan US#5555608, the method claimed in applicant's new Claim 48 teaches "providing...a plurality of islands each... having at least one undercut surface... so as to define ...generally *tapered* apertures between adjacent *pairs* of ... islands". As can be seen in the drawings (Figs.1-7) and specification (pg.14 pp.1, revised) such tapered apertures are defined by such adjacent pairs of islands which are in a lateral relationship relative to a longitudinal direction of applied shear.

In contrast, Allan teaches a "slot and ridge" type device with a plurality of generally *rectangular* apertures which are effectively defined by "connector members 85", the inactive surface of a longitudinally adjacent "ridge", and a *singular* undercut surface ("hook termini" 82), as seen in Fig. 8. Therefore, it is apparent that the device provided by Allan is significantly different in both form and function. It should be noted that this distinction in the general shape of apertures provides an important functional differential between the present invention and the prior art in that the "tapered" apertures of the present invention cause the portions to effectively self-align as they are slidingly engaged by a relative shearing force, thereby requiring less precise initial alignment than Allan.

Thus it can be seen that Claim 48 clearly defines a unique method of fastening two portions which is differentiated from Allan in both the form of the device provided and in the action of slidingly engaging ones of first islands into apertures defined by laterally adjacent second islands.

With regard to Akeno US#5797170, the method of the present invention includes the action of "applying a *relative shearing* force to...cause... islands to be *slidingly engaged*...". In contrast, Akeno teaches a device of the "mushroom/prong" type which appears to be engaged by a relative *compressive* force causing the elements to be *engaged by resilient distortion*. Therefore it can be seen that Claim 48 clearly describes a method of fastening two portions which is distinctly unique from Akeno.

Likewise, **with regard to Hall US#4531733 and Keeler US#3526867**, the method of the present invention in Claim 48 includes the action of "applying a relative *shearing* force to...cause... islands to be *slidingly engaged*..." in lieu of a relative *compressive* force causing the portions to be *compressively engaged* as taught by Hall and Keeler. Therefore, the present invention as described in Claim 48 can be seen to be distinct from those of Hall and Keeler in both form of the device and function of the method.

With regard to Keyaki et al US#5655268, the method of Claim 48 includes the action of slidingly engaging the undercut islands of a first portion into apertures of a second portion by application of a relative shearing force, whereas Keyaki teaches a *hook-and-loop* type fastener attached to a substrate by *sewing* through parts of a C shaped device. Therefore Keyaki's invention appears to be irrelevant to the invention of Claim 48.

Per 35 USC Article 103

With regard to Allan US#5555608 in view of Allan US#4872242, the method of Claim 48 is not obvious. In his earlier invention, Allan teaches a generally chevron shaped "slot and ridge" type of fastener which is engaged by *compressing* the portions toward one another so as to at least temporarily distort the engaging elements. In his later patent,

Allan teaches another "slot and ridge" type of fastener also intended to be primarily engaged by a *compressive* force but which, because of additional distance between ridges, appears to also allow some longitudinal movement which might be said to constitute sliding engagement. Nothing in either patent suggests that these aspects should be combined or that a combination of these aspects would result in the present invention.

The applicant's Claim 48 however, includes provision of distinct portions, as differentiated from the prior art above and in Applicant's previous response, which is engaged by *slidingly engaging* the portions by application of a *relative shearing force*. Furthermore, Claim 48 also includes providing apertures which are defined by adjacent islands as discussed above which can not be inferred from the applied references. Thus, Claim 48 is not obvious with regard to the applied references in that at least:

1. The result achieved by the present invention is new and superior, allowing portions to slidingly engage and self align.
2. Those skilled in the field such as Allan have not previously combined the aspects to achieve the claimed method.
3. There is no suggestion in the prior art that the aspects of chevron shape and sliding engagement should be combined.
4. Combining the aspects of each referenced invention could not result in the method of Claim 48 (see discussion pg.36 OA Response 6/19/03).
5. The references each teach a distinct invention which appear to be complete and effective on their own.

With regard to Allan US#555608) in view of Sink US#5943705: In that the examiner's prior citation of these references spoke specifically to Claim 46, and in that the applicant's response was previously provided in the OA Response of 6/19/03, these references in combination do not appear to be relevant to new Claim 48.

With regard to Keeler US#3526867 in view of Kanzaka US#4521943, In that the examiner's prior citation of these references spoke specifically to Claim 30, and in that

the applicant's response was previously provided in the OA Response of 6/19/03, these references in combination do not appear to be relevant to new Claim 48.

With regard to other cited Prior Art: The applicant has previously distinguished the present invention from the cited prior art in the OA Response of June 19, 2003. Claim 48 is intended to further distinguish the invention as to method.

Regarding new Claims 49-55

New Claims 49 through 55 are dependent claims relative to distinct types of embodiments of the invention which also include the general apparatus for manufacture described in the specification. In that each of these claims are specifically dependent on claims previously discussed in the OA Response of June 19, 2003 it does not appear that the applied references are directly relevant. Although it may be possible to manufacture certain embodiments of the applied references by utilizing a similar apparatus, the described apparatus is claimed here only as specifically related to the diverse embodiments of the present invention.

CONCLUSION:

The applicant submits that, to the best of his knowledge, the application as amended is in proper form and is now in condition for allowance. If for any reason this application is not believed to be in full condition for allowance, applicant respectfully requests the constructive assistance and suggestions of the Examiner as per M.P.E.P. 2173.02 and 707.07(j). Thank you for your assistance.

Respectively Submitted this 11th day of February, 2004.

Leonard Duffy, Applicant, Pro Se

P.O. Box 99

Hinesburg, VT 05461

phone 802 482 3040 fax 802 482 3490 email lduffy@wcvl.com

